

# 650 V / 50 A 3-phase Motor Drivers

## SAM2 Series

### Description

The SAM2 series are 3-phase brushless motor drivers in which output transistors, pre-drive circuits, bootstrap diodes with current-limiting resistors, and a temperature-sensing thermistor are highly integrated. These new products are suitable for the 3-phase motor drivers used in automotive applications, industrial equipment, etc. Although we achieved a reduction in package size of 30% from the previous model, the new package still ensures adequate insulation distance. The extensive protection functions will also meet various quality requirements and standards. The soft recovery techniques employed in the output transistors contribute to lowering both loss and emission noise.

### Features

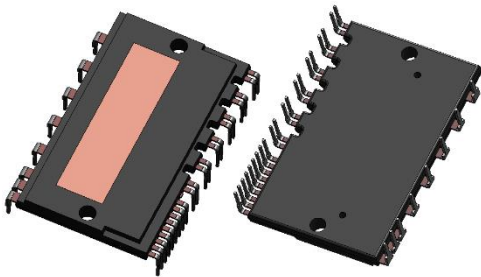
- Isolation Voltage: 2500 V (for 1 min)
- Built-in Thermistor
- Fault Signal Output at Protection Activation
- Shutdown Signal Input
- Protection Functions:
  - Undervoltage Lockout for Power Supply (UVLO): Auto-restart
  - Overcurrent Protection (OCP): Auto-restart

### Applications

- For Automotive Applications Such As:
  - Electric Compressor
  - Electric Oil Pump
- For Industrial Equipment Such As:
  - Commercial Air Conditioner Compressor
  - General-purpose Inverter
  - Servomotor

### Selection Guide

- DIP30



31.0 × 52.5 × 5.6 mm

Application	Part Number	ES Schedule
Automotive	<b>SAM265M50AS1*</b>	2021 2H
Industrial	<b>SAM265M50BS1*</b>	Mar. 2021
Industrial	<b>SAM212M10BS1*</b>	Mar. 2021

\*Under development

### Block Diagram

